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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,653	09/25/2003	Harry Eugene Flynn	KMG2010-US1	8371

36732 7590 10/19/2004

LAW OFFICE OF STANLEY K. HILL, PLC
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EXAMINER

HOOK, JAMES F

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/670,653	Applicant(s) FLYNN ET AL.	
	Examiner James F. Hook	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1-12-04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishida. The patent to Nishida discloses the recited method for making a liner joint of a refractory material such as brick material comprising providing a first substantially cylindrical structure 16 (fig 2) having a liner material 14, providing a second substantially cylindrical structure of the liner material 11, and a third substantially cylindrical structure 17, creating a cavity in the first structure of equal or larger diameter than the outside of the second and third structures, shaping the ends of the second and third structures to be substantially identical to the shape of the cavity, and inserting the second and third structures into the cavities.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Ligon. The patent to Ligon discloses the recited method for making a liner joint of a refractory material such as ceramic material comprising providing a first substantially cylindrical structure 2 (figs 3 or 4) having a liner material 12, providing a second substantially cylindrical structure of the liner material 28, creating a cavity in the first structure of equal or larger diameter than the outside of the second structure, shaping the end of the

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second structure to be substantially identical to the shape of the cavity, and inserting the second structure into the cavity.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishida in view of Nannini. The patent to Nishida discloses all of the recited structure with the exception of forming the cavity off center such that the second and third structures are tangential to the first structure. The patent to Nannini discloses that it is old and well known in furnace type refractory lined structures to provide inlets 28 that are tangential and off center to a first cylindrical structure 10. It would have been obvious to one skilled in the art to offset the cavities in Nishida such that the second and third structures are tangential to the first structure as suggested by Nannini as such improves flow of the gases in the pipes. The use of the first as an inlet and second as an outlet are taught by Nishida.

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ligon. The patent to Ligon discloses all of the recited structure with the exception of forming a third cavity and providing a third structure, and providing the second and third structures in offset cavities to have the second and third structures tangential to the first. It is considered an obvious duplication of parts to provide a third cavity and structure as

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such is within the abilities of the skilled artisan to provide multiple structures if a plurality of inlets or outlets were needed, as such is merely a duplication of parts. It is considered an obvious choice of mechanical design to offset the cavities so that the second and third structures were tangential to the first in that such would only require routine skill in the art to form the connection between the first and second structures in an offset manner as such is merely a design choice, and would allow for the connection of pipes that were slightly offset from center to accommodate the needs of the user.

Conclusion

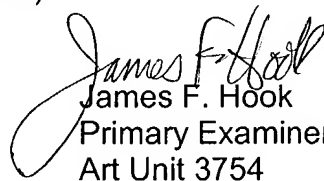
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Straty, Hopkins, Gunnell, Rice, McGuth, Scholz, and Thomas disclosing state of the art refractory lined pipes and connections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (703) 308-2913 until mid November at which time it will change to (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


James F. Hook
Primary Examiner
Art Unit 3754

JFH